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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,181	11/19/2001	Brig Barnum Elliott	00-4063	3369

32127 7590 09/02/2004

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EXAMINER

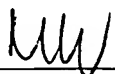
GIBSON, ERIC M

ART UNIT PAPER NUMBER

3661

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/026,181	<b>Applicant(s)</b> ELLIOTT, BRIG BARNUM	
	<b>Examiner</b> Eric M Gibson	<b>Art Unit</b> 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-35,38-44 and 46-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,5-17,34,35 and 38-43 is/are allowed.
- 6) ☒ Claim(s) 18-33,44,46-48 and 50-53 is/are rejected.
- 7) ☒ Claim(s) 49 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 43, 44, 46-49 are objected to because the listing of the claims is not in compliance with 37 CFR § 1.121.
  - a. Claim 43 lacks a status identifier. It should be identified as --(Original)--.
  - b. Claim 44 incorrectly lists the status of the claim as "Original" when changes have been made and are shown by markings. It should be identified as -- (Presently Amended)--.
  - c. Claims 46-49 are necessarily objected as being dependent upon an objected base claim.
2. Failure to follow the revised amendment procedure of 37 CFR § 1.121 with regard to the proper status identifiers will result in Notice of Non-Responsive Amendment.

### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 44, 45-48 and 50-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Gibson (US006198431B1).
  - a. As per claim 44, Gibson teaches a system for synthesizing trajectory path data corresponding to a trajectory path and generated from reference position data and raw position data including a data source having terrain visualization data for generating

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a terrain dataset, a processor for combining the trajectory path data with the terrain dataset to form a composite simulation dataset (column 10, lines 3-20) that can be viewed from more than one perspective (column 7, lines 24-26) on a display (claim 8 (g)).

b. As per claims 46 and 47, Gibson teaches that the data source includes environment data (column 10, line 12).

c. As per claim 48, Gibson teaches that the invention is to be used by many users in a rental situation (column 6).

d. As per claim 50, Gibson teaches a system for distributing a composite simulation dataset generated by combining the trajectory path data with a terrain dataset that can be viewed from more than one perspective (column 7, lines 24-26) including a storage location and interface that allows playback of the composite simulation dataset (claim 8 (g)).

e. As per claim 51, Gibson teaches storing the composite simulation dataset on a recording medium (column 7, lines 20-26).

f. As per claims 52 and 53, Gibson teaches that the information is available through the Internet (claim 7).

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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4. Claims 18, 19 and 21-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson (US006198431B1) in view of Wilson et al. (US006140957A).

a. As per claim 18, Gibson teaches a compact GPS tracker and customized mapping system including a reference receiver having a known position (inherent for functionality of the DGPS chip disclosed at column 4, line 55), a location recording device having a mobile receiver that has a variable position (GPS chip disclosed at column 4, line 55), a processor that generates a trajectory path data based on the raw position data and reference position data, wherein the trajectory path data corresponds to a trajectory path of the mobile receiver (column 5, lines 9-11), and an external device having an interface that couples with the memory for downloading the data and generating a visual display of the trajectory path data (column 7, lines 15-26) and combining the trajectory path data with a terrain dataset to form a composite simulation dataset to be displayed (column 10, lines 3-20). Gibson does not teach that the position is determined at least in part using inertial navigation techniques. The use of inertial navigation in the art of position determination is a well-known precursor to the modern reliance upon GPS for position determination. However, there still exists a need and a use for inertial navigation techniques in the art, even in those systems that already employ GPS. For example, a satellite signal may not always be available or there may not be a sufficient number of satellites visible in order for the GPS system to determine the receiver position; a problem identified in the teaching of Gibson (column 5, lines 20-25). Wilson teaches a method and apparatus for navigation guidance that discloses this need and use of inertial navigation systems in combination with GPS navigation in order

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to provide a system that is capable of determining position when the GPS system is unavailable or unreliable (column 5, lines 22-26). It would have been obvious to one of ordinary skill in the art, at the time of invention, for the position to be determined at least in part using inertial navigation techniques in the system of Gibson, as is well-known in the art, as disclosed by Wilson, in order to provide a system that is capable of determining position when the GPS system is unavailable or unreliable.

b. As per claim 19, Gibson teaches a computer monitoring station for tracking the position (column 5, lines 33-44).

c. As per claim 21, Gibson teaches that the interface between the location recording device and the processor may be wireless (column 5, lines 33-38).

d. As per claim 22, Gibson teaches that the DGPS chip can be used to correct the position signal (column 5, lines 1-2).

e. As per claim 23, the error correction claimed is the conventional method of error correction for position in a DGPS system. See applicant's specification page 5.

f. As per claims 24-26, Gibson teaches storing the trajectory path data as raw position data and converting to GPS position coordinates relative to the scene traversed (column 8, lines 37-58).

g. As per claim 27, Gibson teaches that the external device comprises a computer (column 6, lines 57-58).

h. As per claims 28 and 30, Gibson teaches combining the trajectory path data with a terrain dataset to form a composite simulation dataset to be displayed (column 10, lines 3-20) on a display (claim 8 (g)).

i. As per claims 29 and 31, Gibson teaches a variety of viewing perspectives (column 7, lines 24-26).

j. As per claim 32, Gibson teaches that the information is available through the Internet (claim 7).

k. As per claim 33, Gibson teaches storing the composite simulation dataset on a recording medium (column 7, lines 20-26).

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Gibson and Wilson in view of Ford et al. (US20010053970A1).

a. As per claim 20, the combination teaches the invention as explained in the rejection of claim 18. The combination does not teach that the recording device contains either a video or audio recording device. Ford teaches a method and system of position tracking and field data collection that includes a mobile unit that combines a GPS position tracking unit with an audio recording device (page 3, ¶ [0029]), in order to comment on the positions recorded (page 3, ¶ [0032]). It would have been obvious to one of ordinary skill in the art, at the time of invention, to include audio or video recording device in the tracking unit of the combination, in order to allow the user to comment on the position being tracked, as taught by Ford.

***Allowable Subject Matter***

6. Claims 1, 2, 5-17, 34, 35, and 38-43 are allowed.

a. As per independent claims 1 and 34, the amendment filed 5/24/2004 overcomes the teaching of the prior art. Specifically, the prior art does not teach or

reasonably suggest in combination the system and method of recording and synthesizing position data of the present invention including that the processor polls the reference receiver a plurality of times at a variable execution rate and generates a plurality of error correction signals and the variable execution rate is based at least in part on a desired resolution as now claimed.

b. Claims 2, 5-17, 35, and 38-43 serve to further define the invention of claims 1 and 34 over the prior art.

7. Claim 49 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

a. As per claim 49, the prior art does not teach or reasonably suggest in combination the present invention including the limitation of displaying the composite simulation dataset from the first-person perspective, and wherein the display represents more than one trajectory path with the terrain dataset by displaying additional participants following more than one trajectory path.

### ***Response to Arguments***

8. Applicant's arguments filed 5/24/2004 with respect to claims 44 and 46-53 have been fully considered but they are not persuasive.

a. As per independent claims 44 and 50, the applicant argues that the additional limitation that the composite simulation dataset can be viewed from more than one perspective overcomes the teaching of Gibson. The Examiner disagrees



because Gibson teaches that the maps used to print out the composite simulation dataset can take a variety of different forms (see column 7, lines 24-26), which satisfies the limitation that the dataset “can be viewed from more than one perspective” as claimed, wherein a different form of the map is considered to be a different “perspective” within the scope of the invention.

9. Applicant's arguments with respect to claims 18-33 have been considered but are moot in view of the new ground(s) of rejection.

a. As per independent claim 18, the additional limitation that the position be determined in part by using inertial navigation techniques has been explained above in the rejection of claim 18.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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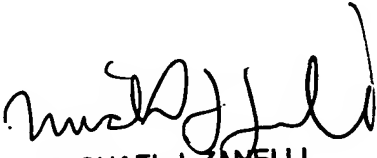
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Gibson whose telephone number is (703) 306-4545. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EMG

  
MICHAEL J. ZANELLI  
PRIMARY EXAMINER